

GUN SAFE WITH PULL OUT DELIVERY SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application Number 60/433,156, filed on December 13, 2002.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not applicable.

BACKGROUND OF THE INVENTION

[0003] The present invention relates to a device for storing guns. In particular, the present invention relates to a pull out delivery system for storing one or more guns within an enclosure.

[0004] When procuring a gun safe it is important to select a safe that maximizes the utilization of space and provides easy access to the guns stored within the confines of the safe. Some problems associated with conventional gun safes include situations where the guns are poorly secured, storage potential is underutilized, and excessive effort and time is expended in storing and retrieving guns. Additionally, difficulty in accessing and retrieving stored firearms may result in damage to the guns from nicking or striking against each other and the interior of the safe.

[0005] Conventional firearm safes provide non-movable firearm racks attached to the interior walls of the safe. While the guns stored near the door may be easy to access, guns stored further away, towards the rear wall are more difficult to retrieve and secure, requiring the owner to reach deeply into the safe. In addition to the possibility of

scuffing or damaging the guns, it is also possible that such reaching may lead to personal injury.

[0006] Accordingly, there exists a need for a gun storage device that allows easy access to all guns and eliminates the need to stretch or reach deeply into the safe. The present invention fills these needs as well as other needs.

BRIEF SUMMARY OF THE INVENTION

[0007] In order to overcome the above stated problems and limitations there is provided a safe or enclosure which includes a cabinet or storage rack that is positioned within the safe to maximize capacity. In particular, the storage rack slides out from the safe allowing easy access to the stored guns.

[0008] The safe includes an interior compartment defined by a top wall, a bottom wall and one or more side walls. A rail is pivotally coupled to a second surface of the cabinet and a track is coupled to a protrusion formed in the side wall of the safe so that the track and the rail are slidably coupled to one another. A gun rack is coupled to a first surface of the cabinet and provides storage for one or more guns. In particular, the gun rack includes an upper barrel receiving portion and a lower lip for supporting the butt of a gun. The guns stored on the gun rack are easily accessible given the fact that the cabinet may be selectively moved into and out of the interior compartment. In addition, the cabinet may be pivoted relative to the safe when it is positioned outside the interior compartment to increase the accessibility of the gun rack. Furthermore, the second surface of the cabinet may be positioned at a distance from the side wall of the enclosure to allow for additional gun storage.

[0009] Additional objects, advantages and novel features of the present invention will be set forth in part in the description which follows, and will in part become apparent to those in the practice of the invention, when considered with the attached figures.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0010] The accompanying drawings form a part of this specification and are to be read in conjunction therewith, wherein like reference numerals are employed to indicate like parts in the various views, and wherein:

[0011] FIG. 1 is a front perspective view of a safe with a storage rack that has been slid outwardly and rotated relative to the safe;

[0012] FIG. 2 is a front perspective view of the safe in FIG. 1 showing another storage rack that has been slid outwardly and rotated relative to the safe;

[0013] FIG. 3 is an enlarged view of a portion of the safe shown in FIG. 1 with the guns removed to show the gun racks on the interior portion of the safe door and the interior wall of the safe;

[0014] FIG. 4 is a perspective view of a receiving piece that is adapted to be mounted to the interior wall of the safe;

[0015] FIG. 5 is a perspective view of a bracket that is mounted to the interior wall of the safe that is adapted to accept the receiving piece shown in FIG. 4; and

[0016] FIG. 6 is a side elevational view showing the receiving piece shown in FIG. 4 and the bracket shown in FIG. 5.

DETAILED DESCRIPTION OF THE INVENTION

[0017] Referring now to the drawings in detail, and initially to FIGS. 1 and 2, there is shown a gun safe 10 having a pull out delivery system constructed in accordance

with one of the embodiments of the present invention. Safe or enclosure 10 includes an interior compartment 27 that is defined by a top wall 29, a bottom wall 30 and a plurality of side walls 22. In addition, safe 10 may also have a door opening 31 defined therein that may be occupied by a safe door, which is not shown in the drawings. The safe door may be pivotally coupled with one or more of walls 22 and be equipped with a lock to prevent unauthorized entry into the interior compartment 27 of safe 10.

[0018] With additional reference to FIG. 3, one or more guns may be stored within interior compartment 27 of safe 10 through the use of at least one pull-out cabinet 11. Cabinet 11 may have a gun rack 12 and supplemental storage compartments or shelves 13 coupled to a first surface 28 of cabinet 11. In particular, gun rack 12 may include a lower lip 14 and an upper barrel holder 15. A top surface of lower lip 14 is used as a support for a butt 16 of a gun, and barrel holder 15 has a plurality of recesses 18 defined therein for retaining a barrel 17 of the gun.

[0019] Cabinet 11 may also have a second surface, not shown, which is located opposite to first surface 28. As best seen in FIG. 1, the second surface includes an upper rail and a lower rail (also not shown) for engaging an upper track 19a and a lower track 19b that are mounted to an interior surface of one of walls 22. By joining the rails on the second surface of the cabinet 11 with tracks 19a, 19b, cabinet 11 is capable of moving or sliding into and out of interior compartment 27 of safe 10.

[0020] Furthermore, cabinet 11 is hingedly coupled with the upper and lower rail. In particular, when cabinet 11 is pulled out from interior compartment 27 of safe 10, cabinet 11 may be rotated approximately 90° relative to cabinet's 11 position when it is fully pulled out from interior compartment 27 of safe 10. The pivotal motion of cabinet

11 relative to safe 10 allows for easier access to gun rack 12 located on cabinet 11.

Tracks 19a and 19b may be attached to protrusions 20a and 20b that extend from the inside wall of safe 22.

[0021] As best seen in FIG. 1, protrusions 20a and 20b project outwardly from inner wall 22 a sufficient distance to allow for the storage of additional guns in the space between wall 22 and the second surface of cabinet 11. With additional reference to FIGS. 2 and 3, the storage of these particular guns may be accomplished by a bracket 23 attached to inner wall 22 between upper track 19a and lower track 19b. It will be understood that a plurality of receiving modules 24 may be attached to bracket 23. Additionally, the lower protrusion 20b serves to support the butt of the gun.

[0022] As best seen in FIG. 4, barrel receiving module 24 may include a front portion or cradle 25 for receiving the barrel of a gun, and a rear portion or clip 26 for securing the individual barrel receiving module to bracket 23. With additional reference to FIG. 5, bracket 23 is generally Z-shaped and fixedly mounted on internal wall 22 of safe 10. Barrel receiving module 24 may be attached or clipped onto the bracket 23 by clip 26 on the rear side of the individual barrel receiving module 24. The cradle or barrel receiving portion 25 of the individual barrel receiving modules 24 includes a uniquely shaped concave recess to accommodate barrels of various gun types such as, but not limited to, double barrel, side-by-side and under and over. Cradle 25 may have a soft contact surface such as, for example, rubber to further protect the gun barrels from scratches or nicks. This soft contact surface may be either a separate piece or integrally attached to module 24. The individual barrel receiving pieces 24 can come in various sizes. Other pieces may also be attached to bracket 23, such as a hook portion, providing

a series of hooks for additional versatility. While clip 26 is shown with a single prong, it will be understood that the clip may have two or more prongs.

[0023] As best seen in FIG. 5, bracket 23 has a first leg 45 and a second leg 46 and may be formed of a substantially rigid material. First leg 45 of bracket 23 is secured to wall 22 of safe 10. Although a plurality of rivets 47 are shown in FIG. 5, bracket 23 may also be secured to wall 22 by screws, welding, or any other conventional means. Second leg 46 of bracket 23 protrudes outwardly and upwardly away from wall 22, forming a groove 48 between second leg 46 and wall 22.

[0024] As best seen in FIG. 6, barrel receiving module 24 with clip 26 and bracket 23 are shown. Barrel receiving module 24 may be mounted to the bracket 23 by sliding clip 26 of barrel receiving module 24 into groove 48. This mechanism allows barrel receiving modules 24 to be positioned anywhere laterally along wall 22 of safe 10.

[0025] Once module 24 is coupled to bracket 23 as best seen in FIG. 1, the butt 16 of a gun may be positioned on a top surface of protrusion 20b and the barrel portion of the gun can rest in module 24. Additional guns may be positioned in a similar fashion by fastening a number of modules 24 on bracket that corresponds to the number of guns that need to be stored. Guns may also be stored in the gun rack 12 mounted on cabinet 11. In order to move cabinet 11 into the interior compartment 27 of safe 10, cabinet 11, if necessary, should be rotated about its hinge connection with upper and lower rail until cabinet is in a position that is aligned with tracks 19a, 19b. Once the rails and tracks 19a, 19b are aligned, cabinet 11 is slid inwardly along tracks 19a, 19b until cabinet 11 is positioned within interior compartment 27 of safe 10. The safe door may then be closed and secured to prevent access to the stored guns.

[0026] The gun delivery system of the present invention overcomes the drawbacks and deficiencies of the prior art. Specifically, the delivery system of the present invention allows for one or more storage racks within the safe to maximize capacity. Furthermore, the cabinet in the delivery system slides out from the safe on rails and rotates with respect to the safe thereby allowing easy access to the guns stored within the safe.

[0027] While particular embodiments of the invention have been shown, it will be understood, of course, that the invention is not limited thereto, since modifications may be made by those skilled in the art, particularly in light of the foregoing teachings. Reasonable variation and modification are possible within the scope of the foregoing disclosure of the invention without departing from the spirit of the invention.